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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/856,116	05/14/97	CHEN F	AMAT/1931

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MM41/0413

EXAMINER	
SOUW.B	
ART UNIT	PAPER NUMBER
2814	

DATE MAILED: 04/13/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

08/856,116

Applicant(s)

Chen et al.

Examiner

Bernard Souw

Group Art Unit

2814



☒ Responsive to communication(s) filed on Mar 2, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) 19 is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-12, 15-18, and 20 is/are rejected.

☒ Claim(s) 13 and 14 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on May 14, 1997 is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☒ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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### DETAILED ACTION

1. The reply received on 03/05/99, Paper No. 5, is not fully responsive to the prior Office action mailed on 03/03/99 (Paper No. 4). Since the above-mentioned reply appears to be *bona fide*, applicant is given ~~ONE (1) MONTH or THIRTY (30) DAYS~~ <sup>THREE MONTHS</sup> from the mailing date of ~~this notice~~ <sup>said prior Office action</sup>, ~~whichever is longer~~, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

2. Applicant's election with traverse of claims 1-18 and 20, drawn to a method of making a semiconductor device, classified in Class 438, Subclass 643, in Paper No.5 is acknowledged. The traversal of claim 19 is on the ground(s) that the Examiner does not state any basis for finding that the identified processes are materially different from the processes claimed by the Applicants. This is not found persuasive because a process that deposits metal patterns on a substrate board for receiving an IC chip, or a process that forms contacts for field emission cathode rays, are both materially different from the processes claimed, e.g., regarding substrate material(s). Not only the two products are materially different than the Applicant's, the specific materials being involved in the processes performed in the apparatus, too, can be easily changed or replaced by other materials. For example, a CVD chamber for depositing  $\text{Si}_x\text{N}_y$  or copper can be as well used to deposit a great variety of other materials, such as insulators (e.g.,  $\text{SiO}_2$ ), metals (e.g., aluminum), and other compounds (e.g., TiN), just by changing the gas precursors. In a similar manner, a plasma assisted sputtering device with a tantalum target can be easily transformed to deposit other metals and compounds by removing

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the tantalum foil from the target holder and replacing it with other sputtering target material(s), e.g., molybdenum, nickel, or gold .

The requirement is still deemed proper and is therefore made FINAL.

*Papers related to this application may be submitted directly to Art Unit 2814 by facsimile transmission. Papers should be faxed to Art Unit 2814 via the Technology Center 2800 fax center located in Crystal Plaza 4, room 4C23. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (15 November 1989).*

*Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard E. Souw whose telephone number is (703) 305-3303. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:00 pm.*


*If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhry, can be reached on (703) 305-2794. The fax number for the organization where this application or proceeding is assigned is (703) 308-7722 or -7724.*

*Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center receptionist at (703) 308-0956.*

BES

Bernard E. Souw

March 31, 1999



Olik Chaudhry  
Supervisory Patent Examiner  
Technology Center 2800